

TENAC™ LM511

Asahi Kasei Corporation - Acetal (POM) Homopolymer

General Information

General			
Additive	• Lubricant		
Features AKEP website	• Friction, Low	• Lubricated	• Wear Resistant
Uses	• Engineering Parts	• Gears	• Housings
Part Marking Code (ISO11469) (ISO 11469)	• >POM<		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.42	g/cm ³	ASTM D792 ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	22	g/10 min	ISO 1133
Molding Shrinkage - Flow	1.8 to 2.2	%	Internal Method
Water Absorption (24 hr, 23°C, 50% RH)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3000	MPa	ISO 527-1
Tensile Stress			
Yield	65.0	MPa	ISO 527-2
--	65.0	MPa	ASTM D638
Tensile Elongation			
Break	30	%	ASTM D638
Break	25	%	ISO 527-2
Flexural Modulus			
--	2900	MPa	ASTM D790
--	2800	MPa	ISO 178
Flexural Strength	97.0	MPa	ASTM D790



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Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	7.0	kJ/m ²	ISO 179
Notched Izod Impact	63	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	170	°C	ASTM D648
0.45 MPa, Unannealed	160	°C	ISO 75-2/B
1.8 MPa, Unannealed	120	°C	ASTM D648
1.8 MPa, Unannealed	95.0	°C	ISO 75-2/A
CLTE - Flow	1.0E-4	cm/cm/°C	ASTM D696 ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.70 mm)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	80 to 90	°C
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	190 to 210	°C
Mold Temperature	> 60	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

